

ABSTRACT OF THE DISCLOSURE

A method for purifying an oligonucleotide that comprises providing an oligonucleotide attached to a substrate, wherein the oligonucleotide contains phosphate protecting groups; contacting the oligonucleotide with a reagent, e.g., an organic amine, that cleaves the phosphate protecting groups from the oligonucleotide without detaching the oligonucleotide from the substrate; isolating the oligonucleotide attached to the substrate from the cleaved phosphate protecting groups; and cleaving the oligonucleotide from the substrate. This method provides crude oligonucleotide mixtures that are easier to purify and from which the desired full-length oligonucleotide product can be isolated in higher yields.

H:\DEPT\Law_Dept\Malia\Patent Applications\PB-9907 application.doc